

- 1. An isolated polypeptide comprising the sequence of SEQ ID NO:2 or NO:4, or a fragment or variant thereof.
- 2. A fragment of said polypeptide of Claim 1, wherein said fragment is a functional fragment.
- 3. A variant of said polypeptide of Claim 1, wherein said variant is a functional variant.
- 4. An isolated polynucleotide comprising the sequence of SEQ ID NO:1 or NO:3 or a fragment or variant thereof.
- 5. A fragment of said polypeptide of Chain 4, wherein said fragment is a functional fragment.
- 6. A variant of said polypertide of Claim 4, wherein said variant has a 96% sequence identity to SEQ ID NO:1 or 3.
- 7. An Helicobacter pylori anti- σ^{28} factor comprising a polypeptide sequence of SEQ ID NO:6, or a fragment or variant thereof.
- 8. A fragment of said *Helicobacter pylori* anti-o²⁸ factor polypeptide of Claim 7, wherein said fragment is a functional fragment.
- 9. A variant of said Helicobacter pylori anti-σ²⁸ factor polypeptide of Claim 7, wherein said variant has a 96% sequence identity to SEQ ID NO:6.
- 10. An Helicobacter pylori anti-σ²⁸ factor comprising a polynucleotide sequence of SEQ ID NO:5 or a fragment or variant thereof.
- 11. A fragment of said Helicobacter pylori anti-σ²⁸ factor polynucleotide of Claim 10, wherein said fragment is a functional fragment.
- 12. A variant of said *Helicobacter pylori* anti-σ²⁸ factor polynucleotide of Claim 10, wherein said variant has 96% sequence identity to SEQ ID NO:5.
 - 13. An expression vector comprising the polynucleotide of Claim 4.
 - 14. A recombinant host cell comprising the expression vector of Claim 13.
- 15. A complex of at least two interacting polypeptides comprising HP1122 protein (SEQ ID NO:6) and HP1032 protein (SEQ ID NO:8), HP1122 protein (SEQ ID NO:6) and SID1032 (SEQ ID NO:4), SID1122 (SEQ ID NO:2) and HP1032 protein (SEQ ID NO:8) or SID1122 (SEQ ID NO:2) and SID1032 (SEQ ID NO:4).
 - 16. A complex of at least two interacting polypeptides comprising: a polypeptide having at least 95% amino acid identity with SEQ ID NO:6 and a polypeptide having at least 95% amino acid identity with SEQ ID NO:8;or a polypeptide having at least 95% amino acid identity with SEQ iD NO:6 and a polypeptide having at least 95% amino acid identity with SEQ ID NO:4;or

- a polypeptide having at least 95% amino acid identity with SEQ ID NO:2 and a polypeptide having at least 95% amino acid identity with SEQ ID NO:8; or a polypeptide having at least 95% amino acid identity with SEQ ID NO:2 and a polypeptide having at least 95% sequence identity with SEQ ID NO:4.
- 17. A set of at least two polynucleotides selected from the group comprising:
- a first polynucleotide encoding HP1122 (SEQ ID NO:6) and
- a second polynucleotide encoding HP1032 (SEQ ID NO:8);
- a first polynucleotide encoding HP1122 (SEQ ID NO:6) and
- a second polynucleotide encoding SID1032 (SEQ ID NO:4);
- a first polynucleotide encoding SID1122 (SEQ ID NO:2) and
- a second polynucleotide encoding HP1032 (SEQ ID NO:8);
- a first polynucleotide encoding SID1122 (SEQ ID NO:2) and
- a second polynucleotide encoding SID1032 (SEQ ID NO:4), and combinations thereof.
- 18. A set of at least two polynucleotides selected from the group comprising: a first polynucleotide of sequence SEQ ID NO:5 and a second polynucleotide of SEQ ID NO:7;
- a first polynucleotide of sequence SEQ ID NO: 5 and a second polynucleotide of SEQ ID NO:3;
- a first polynucleotide of sequence SEQ ID NO:1 and a second polynucleotide of SEQ ID NO:7; and
- a first polynucleotide of sequence SEQ ID NO:1 and a second polynucleotide of SEQ ID NO:3, and combinations thereof.
- 19. A set of at least two polynucleotides selected from the group comprising: a first polynucleotide having at least 70% nucleic acid identity with sequence SEQ ID NO.5 and a second polynucleotide having at least 70% nucleic acid identity with sequence SEQ ID NO:7;
- a first polynucleotide having at least 70% nucleic acid identity with sequence SEQ ID NO:5 and a second polynucleotide having at least 70% nucleic acid identity with sequence SEQ ID NO:3;
- a first polynucleotide having at least 70% nucleic acid identity with sequence SEQ ID NO:1 and a second polynucleotide having at least 70% nucleic acid identity with sequence SEQ ID NO:7;
- a first polynucleotide having at least 70% nucleic acid identity with sequence SEQ ID NO:1 and a second polynucleotide having at least 70% nucleic acid identity with sequence SEQ ID NO:3 and combinations thereof.

